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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/614,196	03/12/1996	KYOJI TAMURA	1232-4252	9755

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EXAMINER

ONUAKU, CHRISTOPHER O

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/614,196

Applicant(s)

TAMURA ET AL.

Examiner

Christopher O. Onuaku

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/11/04
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,9-17 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,9-17 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/11/04 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 9-16&20 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments filed 6/11/04 with respect to claims 1-3,5,6&17 have been fully considered but they are not persuasive.

Applicant argues that Mimura fails to disclose or suggest to display a frame which shows a photometric zone nor to change the position or size of the figure. Examiner disagrees.

Mimura discloses in Fig.1, the display circuit 6, microcomputer 11 and photometric area selecting switch 10, and the display of field of image (photometric

area) 21 of Fig.2. The microcomputer 11 controls the display circuit 6 so that the signal mixing section 7 mixes a 25-dividing line signal indicative of dividing lines into the subject image signal which is now being displayed. The photometric area selecting switch 10 is operated so as to mask the blocks 21-2, 21-3, 21-7, 12-10 and 21-15 of the field image 21. Correspondingly, the microcomputer 11 excludes the signal of the blocks 21-2, 21-3, 21-7, 12-10 and 21-15 and controls the lens drive circuit 2 on the basis of the signal for the remaining blocks. The microcomputer 11 controls the display circuit 6 so that the blocks 21-2, 21-3, 21-7, 12-10 and 21-15 are painted over. The blocks painted over and the dividing lines disappear after a predetermined time so that only the image from the CCD will be outputted at the output terminal 9 (see col.2, line 16 to col.3, line 11).

As shown above, the field of image 21 is displayed on the display circuit 6, and the subject image is superimposed on the displayed field of image (frame) 21. The field of image is then reduced to the actual size of the subject image by the microcomputer 10. Here, when the microcomputer 10 cuts off portions of the field of image 21 which do not cover the subject image, the blocks painted over and the dividing lines disappear after a predetermined time, the frame is thereby reduced.

Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1&17 are rejected under 35 U.S.C. 102(b) as being anticipated by Mimura et al (US 5,280,359).

Regarding claim 1, Mimura et al disclose an image pickup device for use in a television camera including a diaphragm control optimizing the light amount for a subject, comprising:

a) a display unit adapted to display the subject image and a frame which shows a photometric zone superimposed on the subject image (see Fig.1, display circuit 6; col.2, line 44 to col.3, line 11);

b) a zone selecting unit used for changing at least either the position or size of the frame displayed on the display unit (see photographic area selecting switch 10; col.2, line 35 to col.3, line 28);

c) an exposure detection unit adapted to detect an exposure condition corresponding to that of the image signal in the photometric zone selected by the zone selection unit, and exposure control unit adapted to determine control parameters corresponding to the detected exposure condition and control exposure in accordance with the control parameters (see the microcomputer 11; col.2, line 55 to col.3, line 28);

d) memory adapted to store the control parameters outputted by the exposure control unit when an exposure control processing by the exposure control unit is completed and an optimum exposure control state for the selected photometric zone is

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obtained (again see microcomputer 11, and signal processing section 5 wherein the microcomputer excludes the masked blocks and controls the lens 2 on the basis of the signal for the remaining blocks to obtain optimum amount of light on the remaining photometric areas; col.2, line 55 to col.3, line 28), here the microcomputer 11 uses the "stored" optimum exposure parameters (inherently stored by the microcomputer 11) to adjust for an optimum amount of light of the remaining photometric area, some of which may be backlighted;

e) control unit adapted to control the exposure control unit to maintain an exposure control state (i.e., optimum exposure state) corresponding to the control parameters stored in the memory in the state that the control parameters corresponding to the optimum exposure control state is stored in the memory (see microcomputer 11, and the discussions above; especially, col.1, lines 60-66 and col.3, lines 12-28). Here once the photometric area is selected, the optimum amount of light for the selected area is determined and inherently maintained during photographing period, even if the selected photographing area is changed, perhaps, by accident.

Regarding claim 17, the claimed limitations of claim 17 are accommodated in the discussion of claim 1 above.

Claim Rejections - 35 U.S.C. § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al in view of Munson (US 5,648,814).

Regarding claim 2, Mimura fails to explicitly disclose wherein if the control parameters are outside a prescribed range, the memory selects an upper-limit value or a lower-limit of the prescribed range of control parameters as the control parameters. Munson teaches in Fig.1-4 method and apparatus of a camera function of a video conferencing system enhanced such that it will operate in an automatic adjustment mode for brightness and color for only a predetermined period of time comprising microcontroller 32 which operates camera 16 in its initial period in the automatic adjustment mode. During this period, as part of the normal operation, microcontroller 32 continuously checks and determines if the image quality is "the same" as the "ideal image". If the image quality is "the same" as the "ideal image", microcontroller 32 continues operation without making any adjustments. Otherwise, microcontroller 32 adjusts brightness and color balance as appropriate. Being able to adjust the exposure value of an object to fall within a predetermined optimum range of values, for example, ideal values, helps to simplify the exposure control function in a camera. It would have been obvious to one of ordinary skill in the art to modify Mimura, as taught by Munson, to include a means to facilitate adjusting the exposure value of an object to fall within a

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predetermined optimum range of values, for example, ideal values, which helps to simply the exposure control function in a camera.

8. Claims 3&5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al in view of Iwasaki (US 5,461,452).

Regarding claim 3, Mimura et al fail to disclose a selected-zone detection unit adapted to determine whether the image signal captured by the image sensor contains the photometric zone upon elapse of a prescribed period of time, and outputting a signal for resetting control parameters in the memory if the captured image signal is not contained in the photometric zone.

Iwasaki in Fig.28&30 shows a visual axis detecting device 110 (col.18, lines 55-67) which detects the visual axis of the photographer, and a tracking device 155 (col.18, lines 64-67, and col.19, line 1 to col.21, line 6), and has approximate spectral characteristics. By adding the selected-zone detecting means feature to a camera, the photographer is better able to produce a better quality picture because of improved exposure. It would have been obvious to one of ordinary skill in the art to modify the camera of Mimura , as taught by Iwasaki, to include a selected-zone detecting feature of Iwasaki to improve the exposure control capability of the camera, thereby creating a better quality camera.

Regarding claim 5, neither Mimura nor Iwasaki explicitly discloses the claimed selecting unit adapted to allow a photographer to select whether maintenance of

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exposure by the memory is to be reset or not. However, as disclosed by Iwasaki and discussed in claim 3 above, the detecting processing portion 115 detects the position of visual axis of the photographer. That is, the detecting processing portion is detecting what the photographer is seeing. It is then obvious that if the photographer considers the image he is seeing to be of poor quality, he can conveniently shift his line of sight to the spot where he can see an image which he considers to be of better quality. This way he has the ability to reset or not the position of the image that the detecting processing portion 115 detects.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura in view of Iwasaki and further in view of Shimuzu (US 5,400,074).

Regarding claim 6, Iwasaki further teaches the claimed "second" memory adapted to storing a video signal of the photometric zone (see Fig.45; column 30, lines 57-67 and column 31, lines 1-6). Here Iwasaki shows that the reading circuit 192 reads the outputs from the element indicated by the coordinates (Xa,Ya) from the CCD 107 according to the decision result indicating that the object is changed. The transferring circuit 193 transfers the above-named coordinates (Xa,Ya), and the outputs from the element obtained by the reading circuit 192 as coordinates (Xb,Yb) indicating the position of new object, and these data are stored in the coordinates holding portion 156. Thereafter, the tracking device 155 executes tracking processing of the position of the object on the basis of the above-mentioned position of the new object.

Neither Mimura nor Iwasaki shows the claimed detector adapted to determine whether a zoomed image signal captured by the image sensor contains the video signal of the photometric zone stored in the "second" memory, and output a signal for resetting the control parameters in the memory if the captured image signal is not contained in the photometric zone.

However, Shimuzu teaches in Fig.5,6&7, col.4, line 62 to col.5, line 32, a video camera device comprising a zoom lens position detecting circuit 15. This zoom lens position detecting circuit detects the amount of movement of the zoom lens in the inner focus lens assembly 1, and the detected amount is supplied to the ROM 16. The ROM 16 stores amounts of F-drop corresponding to various positions of the zoom lens, as shown in Fig.6. An amount of F-drop corresponding to the position of the zoom lens is supplied from ROM 16 to the control amount computing circuit 12 which calculates the open amount for the iris 2, and a gain for the AGC amplifier 4, on the basis of outputs from the loop filter 11 and the ROM 16. Thereafter, the output from the control amount computing circuit 12 is sent to the iris driving circuit 13 and the D/A converter 14. The output from the iris driving circuit 13 is then sent to the iris 2 to control the open amount thereof. Fig.7 shows a graph where the gain B of the AGC amplifier 4 is corrected to the gain curve B' by adding a gain amount 'W' corresponding to the amount of F-drop. This gain correction process shows that the zoomed video signal captured by the image sensor is reset and then corrected if the zoomed video signal is not contained.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the camera of Mimura, to include a

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zoomed video signal detecting means, as taught by Shimuzu, as an added feature to increase the versatility of the camera.

10. Claims 9,14,15&20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura in view of Nishida (US 5,349,415).

Regarding claim 9, the claimed limitations of claim 9 are accommodated in the discussions of claim 1 above, including the claimed adjusting unit adapted to apply a prescribed adjustment to an image signal of the photometric zone selected by the pointing device (see Mimura; col.3, lines 12-28).

Mimura fails to explicitly disclose a pointing device used for changing at least either the position or size of the frame displayed on the display unit. Nishida teaches a photographic optical system controlling apparatus used in video cameras, etc, which performs lens focusing control and exposure control based on image signals obtained from an imaging element comprising pointing device 116 which is provided to allow the user to input the correction and change of the photographic area to the photographic area controlling circuit 110, wherein a displayed image can move in the up, down, left and right directions depending on the detected motion vector and command supplied from the pointing device 116 (see Fig.1,10(a)-10(d)&11(a)-11(c); col.4, line 63 to col.5, line 25; col.5, line 40 to col.6, line 34; col.8, line 36 to col.9, line 22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mimura by realizing Mimura with a pointing

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device, as taught by Nishida , in order to move the displayed image in the up, down, left and right directions as desired.

Regarding claim 14, the claimed limitation wherein when adjustment by the adjusting means has attained a prescribed state, the control means maintains the state of adjustment prevailing at this time is accommodated in the discussions of claim 9 above.

Regarding claim 15, Mimura discloses the claimed selecting unit adapted to allow a photographer to select whether storage of the adjusting data by the control unit is performed or not (see selecting switch 10; microcomputer 11; col.2, line 44 to col.3, line 12), here Mimura discloses wherein the photographer uses the selecting switch 10 to select which blocks of the photographic area is to be masked and which blocks of the photographic area is not to be masked based on the subject image picked up. The selected blocks of the photographic area include the adjusting data to be 'stored' by the microcomputer.

Regarding claim 20, the claimed limitations of claim 20 are accommodated in the discussion of claim 9 above.

11. Claims 10-12&16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura in view of Nishida and further in view of Yamagishi (US 6,630,949).

Regarding claim 10, Mimura and Nishida fail to explicitly disclose wherein the pointing device is a line-of-sight detecting device for detecting position of a photographer's line of sight directed towards the screen. Yamagishi teaches an image processing system for photographing an image and an information processing system comprising a pointing device such as a line-of-sight sensor, wherein the facilities in an image pickup apparatus may be displayed on the display panel as pictures, and wherein the pictures may be selectively entered at the operating means using a pointing device such as a line-of-sight sensor (see col.6, lines 13-46; col.17, lines 35-65).

It would have been obvious to further modify Mimura by realizing Mimura with a line-of-sight pointing device, as taught by Yamagishi, in order, for example, to facilitate detecting/sensing the photographer's line of sight, directed to a desired photographing area/direction.

Regarding claim 11&12, Yamagishi further teaches a track ball and a mouse as a pointing devices (see col.6, lines 13-46).

Regarding claim 16, Yamagishi further teaches wherein the screen is a monitor screen of an electronic viewfinder (see Fig.1B; col.6, lines 13-46).

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura in view of Nishida and further in view of Iwasaki.

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Regarding claim 13, Mimura and Nishida fail to explicitly disclose wherein the adjusting unit adjusts exposure of the image sensing device by adjusting f-stop(focusing), a shutter(exposure), and gain. Iwasaki further teaches wherein the adjusting means adjusts exposure of the image sensing device by adjusting f-stop(focusing), shutter(exposure), and gain (see Fig.28; col.21). It would have been obvious to add an exposure adjusting means to Mimura in order, for example, to adjust the exposure of the image sensing device by adjusting f-stop(focusing), shutter(exposure), and gain, as taught by Iwasaki.

Conclusion

13. Any inquiry concerning this communication or earlier communications from this examiner should be directed to Christopher Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on Tuesday to Thursday from 7:30 am to 5:00 pm. The examiner can also be reached on alternate Monday.

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, ^{Thai Tran} ~~Andrew Christensen~~, can be reached on (703) ³⁰⁵⁻⁴⁷²⁵ ~~308-9644~~.
TTG
8/22/04

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications intended for entry)

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and (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to Customer Service whose telephone number is (703) 306-0377.


COO

8/20/04


THAI TRAN
PRIMARY EXAMINER